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Product datasheet for AP23662PU-N

CYB5R3 (C-term) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	**Peptide ELISA:** 1/32000 (Detection Limit). **Western Blot:** 0.01-0.03 µg/ml. Approx 37kDa band observed in Human Placenta, Testis and Umbilical Cord lysates. **Immunohistochemistry on Paraffin Sections:** 3-5 µg/ml. In paraffin embedded Human Adrenal Gland shows heavy vesicular/granular staining in the cytoplasm of medular cells.
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Synthetic peptide from the C-terminus of human CYB5R3 (NP_000389.1; NP_001123291.1; NP_001165131.1).
Specificity:	This antibody is expected to recognize all three reported isoforms (NP_000389.1, NP_001123291.1 and NP_001165131.1).
Formulation:	Tris saline, pH~7.3 State: Aff - Purified State: Liquid purified IgG fraction. Stabilizer: 0.5% BSA Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the immunizing peptide.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	cytochrome b5 reductase 3
Database Link:	Entrez Gene 1727 Human P00387

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Background: CYB5R3 belongs to the flavoprotein pyridine nucleotide cytochrome reductase family and contains 1 FAD-binding FR-type domain. There are two isoforms, NADH-cytochrome b5 reductase 3 membrane bound form and NADH-cytochrome b5 reductase 3 soluble form. Its functions include desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in erythrocyte, methemoglobin reduction. Defects in CYB5R3 are the cause of hereditary methemoglobinemia (HM). There are three forms of this disease: type 1 (HM1) in which the enzyme is only deficient in erythrocytes with a mild cyanosis; type 2 (HM2), in which the enzyme is completely deficient; type 3 (HM3) where the deficiency is seen in all blood cells. Type 2 is a severe form accompanied with mental retardation and neurological impairment.

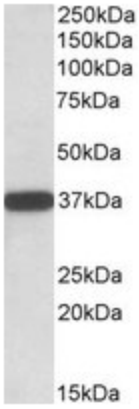
Synonyms: NADH-cytochrome b5 reductase 3, B5R, DIA1, Diaphorase-1

Note: Calculated Molecular Weight: 38.2kDa (NP_001165131.1).

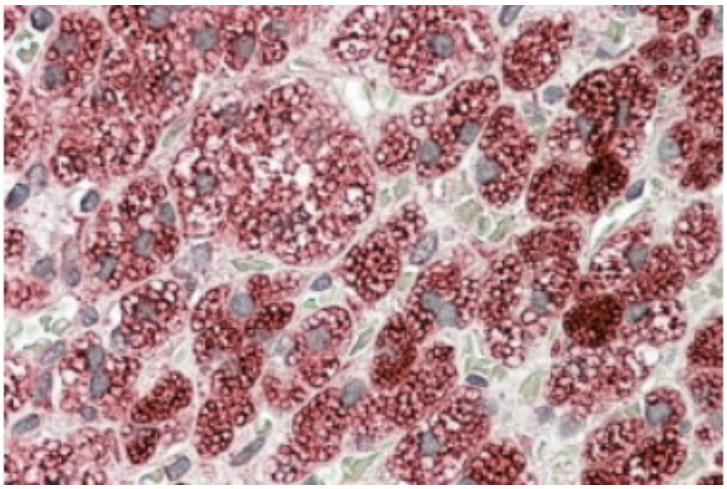
Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism

Product images:



Cyb5r3 antibody staining of Human Umbilical Cord lysate at 0.01 ug/ml (35ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Cyb5r3 antibody staining of paraffin embedded Human Adrenal Gland at 3.8 ug/ml. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.